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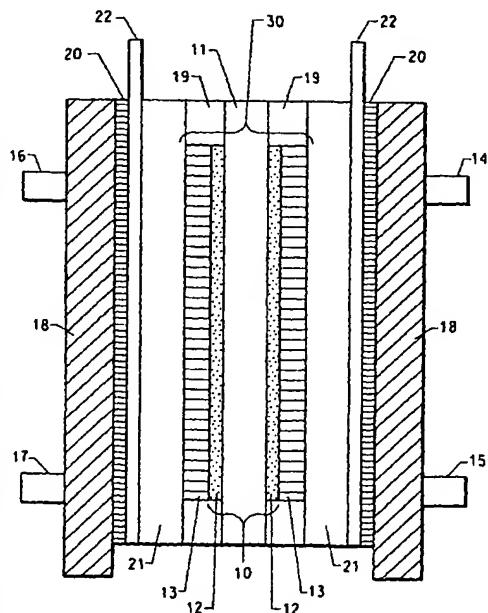
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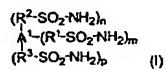
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- (71) Applicant (for all designated States except US): E.I. DUPONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TEASLEY, Mark,
- (E. [US/US]; 118 Eden Road, Landenberg, PA 19350 (US). YANG, Zhen-Yu [US/US]; 177 Thompson Drive, Hockessin, DE 19707 (US).
- (74) Agent: FICKES, Daphne, P.; E. I. Du Pont De Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, DE 19805 (US).
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(54) Title: FLUORINATED SULFONAMIDE COMPOUNDS AND POLYMER ELECTROLYTE MEMBRANES PREPARED THEREFROM FOR USE IN ELECTROCHEMICAL CELLS



(57) Abstract: A fluorinated sulfonamide small molecule having the general structure (Formula I) wherein m, n and p are 0 to 3, with the proviso that m + n + p is equal to 1 to 4; A₁? is an aromatic heterocyclic group, with the proviso that carbon atoms of the heterocyclic ring are fully substituted by fluorinated sulfonamide groups; and R₁?1?, R₂?2?, and R₃?3? are linear or branched perfluoroalkylene groups, optionally containing oxygen, chlorine, bromine, or iodine atoms. Polymers and small molecules useful in making polymer electrode membranes, membrane electrode assemblies, and electrochemical cells, such as fuel cells, are also described.



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